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1	US 20060269009 A1	20061130	19	Transmission schemes for multi-antenna communication systems utilizing multi-carrier modulation	375/260	375/267
2	US 20060256843 A1	20061116	20	Method and apparatus for reducing interference in spread spectrum signals using spreading code cross-correlations	375/148	
3	US 20060251198 A1	20061109	23	Systems, methods, and apparatus for phase noise mitigation	375/350	375/340
4	US 20060245477 A1	20061102	9	CDMA reception method, device, and wireless communication system	375/148	375/260
5	US 20060203891 A1	20060914	23	Systems and methods for beamforming and rate control in a multi-input multi-output communication systems	375/132	375/260
6	US 20060203794 A1	20060914	21	Systems and methods for beamforming in multi-input multi-output communication systems	370/344	
7	US 20060188006 A1	20060824	9	Method and apparatus for estimating gain offsets for amplitude-modulated communication signals	375/148	375/320
8	US 20060062322 A1	20060323	20	Noise variance estimation in wireless communications for diversity combining and log-likelihood scaling	375/285	375/260
9	US 20060039331 A1	20060223	32	Multi-carrier CDMA radio transmitting method and apparatus, and channel estimation method and apparatus for multi-carrier CDMA radio transmitting system	370/335	
10	US 20050265433 A1	20051201	68	Channel estimation device and method, demodulation device and method, and fading frequency decision device and method	375/148	
11	US 20050249304 A1	20051110	24	Wireless communication system, wireless communication apparatus, wireless communication method, and computer program therefor	375/267	375/347
12	US 20050238109 A1	20051027	43	Communication apparatus and communication method using digital wavelet multi carrier transmission system	375/260	

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1	Krishnan; Ranganathan et al.
2	Grant; Stephen J. et al.
3	Ma; Xiaoqiang et al.
4	Yoshida; Shousei
5	Sampath; Hemanth et al.
6	Sampath; Hemanth et al.
7	Cairns; Douglas
8	Namgoong; June et al.
9	Abeta; Sadayuki et al.
10	Okumura, Yukihiko et al.
11	Takano, Hiroaki et al.
12	Koga, Hisao et al.

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13	US 20050195889 A1	20050908	26	Successive interference cancellation in a generalized RAKE receiver architecture	375/148	
14	US 20050180534 A1	20050818	11	Iterative estimation and equalization of asymmetries between inphase and quadrature branches in multicarrier transmission systems	375/350	
15	US 20050147025 A1	20050707	26	Apparatus and method for estimating a plurality of channels	370/203	375/267; 375/347; 455/101
16	US 20050135324 A1	20050623	20	Apparatus for OFDMA transmission and reception for coherent detection in uplink of wireless communication system and method thereof	370/343	
17	US 20050089124 A1	20050428	15	Method and system for estimating the doppler spread in radio mobile communication systems and computer program product therefor	375/346	
18	US 20050036538 A1	20050217	11	Method and apparatus for calculation of correction factors for path weights in a rake receiver	375/148	
19	US 20050020237 A1	20050127	10	Method and apparatus for transmitting signals in a multi-antenna mobile communications system that compensates for channel variations	455/403	455/562.1
20	US 20040264591 A1	20041230	14	Method and system for M-QAM detection in communication systems	375/261	
21	US 20040233871 A1	20041125	30	Feedback control method and apparatus in closed-loop transmit diversity	370/331	370/249
22	US 20040185909 A1	20040923	10	Linear transformation of symbols to at least partially compensate for correlation between antennas in space time block coded systems	455/562.1	
23	US 20040185792 A1	20040923	12	Method of compensating for correlation between multiple antennas	455/69	455/522; 455/91

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13	Grant, Stephen James et al.
14	Brotje, Lars et al.
15	Auer, Gunther
16	Kim, Yun-Hee et al.
17	Valle, Stefano
18	Niederholz, Jurgen et al.
19	Alexiou, Angeliki et al.
20	Malm, Peter et al.
21	Seki, Hiroyuki et al.
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24	US 20040171398 A1	20040902	23	Channel estimation method for a mobile communication system	455/513	
25	US 20040165676 A1	20040826	21	Transmission schemes for multi-antenna communication systems utilizing multi-carrier modulation	375/267	
26	US 20040153679 A1	20040805	23	Reduced power consumption signal processing methods and apparatus	713/322	
27	US 20040127257 A1	20040701	17	Apparatus, and associated method, for facilitating antenna weight selection utilizing deterministic perturbation gradient approximation	455/560	455/561
28	US 20040091021 A1	20040513	18	Radio receiving apparatus and radio receiving method	375/147	
29	US 20040082356 A1	20040429	85	MIMO WLAN system	455/522	
30	US 20040033791 A1	20040219	14	Channel normalization	455/137	
31	US 20040028121 A1	20040212	60	Receiver processing systems	375/144	375/148
32	US 20040028013 A1	20040212	63	Receiver processing systems	370/335	370/342
33	US 20040017843 A1	20040129	59	Receiver processing systems	375/148	
34	US 20030211851 A1	20031113	14	Radio communication device and method thereof	455/450	455/452. 2
35	US 20030142655 A1	20030731	25	Receiving process method and receiving apparatus in mobile communication system	370/342	370/441

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24	Hanaoka, Seishi et al.
25	Krishnan, Ranganathan et al.
26	Fitton, Michael Philip et al.
27	Raghothaman, Balaji et al.
28	Arima, Takenobu
29	Walton, J. Rodney et al.
30	Schmidl, Timothy M. et al.
31	Fitton, Michael P.
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36	US 20030053413 A1	20030320	32	Radio transmission system and method, and transmitter apparatus and receiver apparatus used in the radio transmission system	370/208	
37	US 20030043775 A1	20030306	20	Mobile communication terminal	370/342	370/441
38	US 20030036359 A1	20030220	43	Mobile station loop-back signal processing	455/63.1	455/43; 455/69
39	US 20030016645 A1	20030123	14	Method for optimal estimation of a propagation channel based solely on pilot symbols, and corresponding estimator	370/342	370/347; 370/519
40	US 20020196754 A1	20021226	32	Method and system for high-speed software reconfigurable code division multiple access communication	370/335	370/442
41	US 20020110109 A1	20020815	42	CDMA receiver	370/342	370/441
42	US 20020085623 A1	20020704	16	System, method and apparatus for wireless channel parameter estimation in spread spectrum communication systems	375/148	
43	US 20020021747 A1	20020221	9	Method and apparatus for partial interference cancellation in a communication system	375/148	375/346
44	US 20010038617 A1	20011108	11	Wireless code division multiple access communications system with channel estimation using fingers with sub-chip spacing	370/335	370/342; 455/422. 1
45	US 20010036812 A1	20011101	12	Bit error estimates from pilot signals	455/67.1 3	455/515
46	US 20010028637 A1	20011011	33	Multi-carrier CDMA radio transmitting method and apparatus, and channel estimation method and apparatus for multi-carrier CDMA radio transmitting system	370/335	370/208
47	US 7154966 B2	20061226	15	Method and system for M-QAM detection in communication systems	375/340	375/324

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36	Sawahashi, Mamoru et al.
37	Kikuchi, Tetsuya
38	Dent, Paul W. et al.
39	Siala, Mohamed et al.
40	Lugil, Nico et al.
41	Kawaguchi, Noriyuki et al.
42	Madkour, Mohamed F. et al.
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45	Engstrom, Bo
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47	Malm; Peter et al.

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48	US 7130580 B2	20061031	13	Method of compensating for correlation between multiple antennas	455/39	375/267; 375/299; 455/101; 455/115.1; 455/562.1
49	US 7095790 B2	20060822	20	Transmission schemes for multi-antenna communication systems utilizing multi-carrier modulation	375/260	370/210
50	US 7058002 B1	20060606	89	OFDM packet communication receiver	370/203	375/260
51	US 7012977 B2	20060314	16	System, method and apparatus for wireless channel parameter estimation in spread spectrum communication systems	375/346	375/144; 375/148; 455/296
52	US 6947373 B2	20050920	13	Method for optimal estimation of a propagation channel based solely on pilot symbols, and corresponding estimator	370/208	370/342; 370/347
53	US 6904078 B1	20050607	38	CDMA receiver and CDMA transmitter/receiver	375/141	375/148; 375/219; 375/232
54	US 6904076 B1	20050607	22	Interference canceller device and radio communication device	375/130	370/335; 375/148; 375/150; 375/346

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48	Alexiou; Angeliki et al.
49	Krishnan; Ranganathan et al.
50	Kumagai; Tomoaki et al.
51	Madkour; Mohamed F. et al.
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55	US 6892053 B2	20050510	12	Bit error estimates from pilot signals	455/63.1	370/332; 370/333; 370/335; 370/342; 370/441; 375/148; 375/224; 375/227; 455/450; 455/464; 455/67.1 1; 455/67.1 6; 455/68
56	US 6856610 B2	20050215	10	Wireless code division multiple access communications system with channel estimation using fingers with sub-chip spacing	370/335	370/342; 375/130
57	US 6842632 B2	20050111	16	Apparatus, and associated method, for facilitating antenna weight selection utilizing deterministic perturbation gradient approximation	455/562.1	455/67.1 1; 455/69
58	US 6757272 B1	20040629	24	Channel estimation unit, and CDMA receiver and CDMA transceiver with channel estimation unit	370/342	370/328; 370/335; 375/260

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56	Schmidl; Timothy M. et al.
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59	US 6700919 B1	20040302	13	Channel estimation for communication system using weighted estimates based on pilot data and information data	375/130	370/206; 370/515; 375/142; 375/267; 375/279; 375/329
60	US 6654431 B1	20031125	35	Multicarrier personal access communication system	375/346	
61	US 6647003 B1	20031111	24	Channel estimation unit, and CDMA receiver and CDMA transceiver with channel estimation unit	370/335	370/480; 370/491
62	US 6633614 B1	20031014	32	Multicarrier personal access communication system	375/264	375/261; 375/295
63	US 6452936 B1	20020917	10	Spread-spectrum communication apparatus with adaptive frame configuration	370/441	370/320; 370/335; 370/342; 370/468
64	US 6449246 B1	20020910	35	Multicarrier personal access communication system	370/210	370/206; 370/328; 370/343; 375/260; 375/261
65	US 6154487 A	20001128	59	Spread-spectrum signal receiving method and spread-spectrum signal receiving apparatus	375/150	375/152
66	US 5768307 A	19980616	21	Coherent demodulation with decision-directed channel estimation for digital communication	375/150	375/324

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60	Barton; Melbourne et al.
61	Abeta; Sadayuki et al.
62	Barton; Melbourne et al.
63	Shiino; Haruhiro
64	Barton; Melbourne et al.
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67	JP 2004007793 A	20040108	53	CHANNEL ESTIMATING DEVICE AND METHOD THEREFOR, MODULATOR AND METHOD THEREFOR, AND FADING FREQUENCY DETERMINING DEVICE AND METHOD THEREFOR		

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